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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/618,211

07/11/2003

Jeffrey D. Provost

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10/12/2006

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EXAMINER

BROWN, MICHAEL J

ART UNIT

PAPER NUMBER

2116

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/618,211	PROVOST, JEFFREY D.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael J. Brown	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell(US Patent 6,701,443) further in view of Cai et al.(US Patent 7,103,319).

As to claim 1, Bell discloses a physical layer(see column 4, lines 24-25) for an inline power device(Medium Dependent Interface(MDI), see column 4, lines 25-26) of a network power system(remote powerability system 20, see Fig. 1), the physical layer comprising an inline power control signal source(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response

signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 2, Bell discloses a power source equipment of a network power system(remote powerability system 20, see Fig. 1), the power source equipment comprising at least one physical layer(see column 4, lines 24-25) including an inline power control signal source(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline

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power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 3, Bell discloses the power source equipment further comprising signal processing of the inline power control signal, wherein the signal processing is external to the at least one physical layer(see column 4, lines 39-47).

As to claim 4, Bell discloses a method of inline power(Medium Dependent Interface(MDI), see column 4, lines 25-26) for a network power system(remote powerability system 20, see Fig. 1), the method comprising sourcing an inline power control signal(control circuitry 80, see Fig. 3) from a physical layer(see column 4, lines 24-25), wherein the inline power control signal(response signal, see column 5, line 41) originating from the physical layer is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However Bell fails to disclose the inline power control signal existing from a physical layer.

Cai teaches the inline power control signal existing from a physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 5, Bell discloses an apparatus for inline power(Medium Dependent Interface(MDI), see column 4, lines 25-26) for a network power system(remote powerability system 20, see Fig. 1), the apparatus comprising a physical layer(see column 4, lines 24-25), and means for sourcing an inline power control signal(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 6, Bell discloses a physical layer(see column 4, lines 24-25) for an inline power device(Medium Dependent Interface(MDI) of a network power system(remote powerability system 20, see Fig. 1), the physical layer comprising an inline power control signal source(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power

applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 7, Bell discloses a power source equipment(power apparatus 26, see Fig. 3) of a network power system(remote powerability system 20, see Fig. 1), the power source equipment comprising at least one physical layer(see column 4, lines 24-25) including an inline power control signal source(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline

power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 8, Bell discloses the power source equipment further comprising a signal processor configured to process the inline power control signal, wherein the signal processing is external to the at least one physical layer(see column 4, lines 39-47).

As to claim 9, Bell discloses a method of inline power(Medium Dependent Interface(MDI), see column 4, lines 25-26) for a network power system(remote powerability system 20, see Fig. 1), the method comprising sourcing an inline power control signal(control circuitry 80, see Fig. 3) originating from a physical layer(see column 4, lines 24-25), wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However Bell fails to disclose the inline power control signal existing from a physical layer.

Cai teaches the inline power control signal existing from a physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.



As to claim 10, Bell discloses an apparatus for inline power(Medium Dependent Interface(MDI) for a network power system(remote powerability system 20, see Fig. 1), the apparatus comprising a physical layer(see column 4, lines 24-25), and means for sourcing an inline power control signal(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 11, Bell discloses a network switch for a network power system(remote powerability system 20, see Fig. 1), the switch comprising at least one physical layer(see column 4, lines 24-25) including an inline power control signal source(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and

when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 12, Bell discloses the switch further comprising signal processing of the inline power control signal, wherein the signal processing is external to the at least one physical layer(see column 4, lines 39-47).

As to claim 13, Bell discloses a system comprising one or more inline power devices(Medium Dependent Interface(MDI), see column 4, lines 25-26), and one or more powered devices(remote powerability system 20, see Fig. 1) coupled to an inline power device, each of the one or more inline power devices and each of the one or more powered devices having at least one port, each port having a physical layer, the physical layer including an inline power control signal source(control circuitry 80, see Fig. 3) wherein an inline power control signal source(response signal, see column 5, line 41) originating from the physical layer controls application of power to the port(Items

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42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 14, Bell discloses the system wherein the inline power devices are power source equipment(power apparatus 26, see Fig. 3)(see column 4, lines 21-29).

As to claim 15, Bell discloses the system further comprising a signal processor external to the physical layers to process the inline power control signal(see column 4, lines 39-47).

### ***Response to Arguments***

2. Applicant's arguments, see "REMARKS/ARGUMENTS", filed 8/7/2006, with respect to the rejection(s) of claim(s) 1-15 under Bell(US Patent 6,701,443) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bell(US Patent 6,701,443) and further in view of Cai et al.(US Patent 7,103,319).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Brown whose telephone number is (571)272-5932. The examiner can normally be reached on Monday-Thursday from 7:00am to 5:30pm(EST).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIRS) system. Status information for the published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications are available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

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